



STATE OF NEW JERSEY

Board of Public Utilities

Two Gateway Center

Newark, NJ 07102

www.bpu.state.nj.us

IN THE MATTER OF)	<u>ENERGY</u>
THE BOARD'S INVESTIGATION)	
INTO JCP&L'S OUTAGES OF THE)	ORDER
JULY 4, 2003 WEEKEND)	
AND THE FOCUSED AUDIT OF)	DOCKET NOS.
JERSEY CENTRAL POWER & LIGHT COMPANY)	EX03070503 & EX02120950

BY THE BOARD:

On March 3, 2003, the Board of Public Utilities ("Board") issued an order directing Board Staff to undertake a focused audit of Jersey Central Power & Light Company's ("JCP&L" or "the Company") planning, operations and maintenance practices. Since that time, Board Staff and JCP&L have been working to improve the reliability of the Company's electricity service. Integral to these efforts have been the audit carried out by Booth & Associates ("Booth") and also the investigation into the power outages over the July 4, 2003 weekend conducted by Special Reliability Master Patrick Downes ("Special Master").

While the audit and investigation are ongoing, with final reports expected in the next few months, both Booth and the Special Master have submitted interim reports addressing primarily improvements to be made prior to the next occurrence of peak loads in Summer 2004. We adopted the Special Master's interim recommendations, which dealt with service reliability on the barrier peninsula, in I/M/O Board's Investigation into JCP&L's Outages of the July 4, 2003 Weekend, Docket No. EX03070503 (December 17, 2003). JCP&L has already made or is in the process of completing these improvements.

Booth subsequently provided specific recommendations to the Board to be implemented in 2004. Certain of these recommendations are specific to the barrier peninsula and others are applicable to the entire JCP&L service territory. Board Staff and JCP&L, with the assistance of the Special Master and Booth, have worked together to create a Memorandum of Understanding ("MOU") that states the specific tasks that JCP&L will perform and a timetable for completing those tasks before the onset of peak load in the summer of 2004. The MOU provides for completion of all of the maintenance necessary for the barrier peninsula prior to the 2004 Memorial Day weekend. The MOU also includes certain tasks that JCP&L will be undertaking beyond the upcoming summer peak and several items that JCP&L will undertake as an ongoing matter to maintain and improve worker and customer safety on their system.

After review and due consideration, the Board HEREBY FINDS that the actions enumerated in the MOU will substantially increase the reliability of the JCP&L system for the 2004 summer

peak and beyond. Accordingly, the Board HEREBY ADOPTS, in its entirety, the Memorandum of Understanding, a copy of which is attached hereto and is made a part hereof. In so doing, the Board endorses the Company's ongoing actions to implement the MOU. The Board further DIRECTS the Company to notify the Board immediately should the Company be unable to complete any of the commitments set forth in the MOU. Lastly, the Board commends JCP&L, Board Staff, the Special Master and Booth for their concerted efforts in this matter.

DATED: ***March 29, 2004***

BOARD OF PUBLIC UTILITIES
BY:

SIGNED

JEANNE M. FOX
PRESIDENT

SIGNED

FREDERICK F. BUTLER
COMMISSIONER

SIGNED

CAROL J. MURPHY
COMMISSIONER

SIGNED

CONNIE O. HUGHES
COMMISSIONER

SIGNED

JACK ALTER
COMMISSIONER

ATTEST:

SIGNED

KRISTI IZZO
SECRETARY

IN THE MATTER OF THE FOCUSED ?
AUDIT OF PLANNING, ?
OPERATIONS AND ?
MAINTENANCE PRACTICES, ? DOCKET NO. EX02120950
POLICIES AND PROCEDURES OF ?
JERSEY CENTRAL POWER & LIGHT ?
COMPANY ?

MEMORANDUM OF UNDERSTANDING

Whereas, the New Jersey Board of Public Utilities (“Board“ or “BPU”), in its Order dated March 13, 2003 in the above-referenced BPU Docket, adopted a stipulation of settlement dated February 18, 2003 that, among other things, provided for Board Staff to undertake a review and focused audit of the Planning and Operations and Maintenance programs and practices of Jersey Central Power & Light Company (“JCP&L” or the “Company”); and

Whereas, Booth & Associates, Inc., the Consultant hired by the Board to conduct the focused audit, has presented draft interim recommendations to increase electrical delivery system reliability for the summer 2004 peak period; and

Whereas, the Board also engaged PJ Downes Associates, LLC to act in the capacity of Special Reliability Master (“SRM”) to make recommendations to the Board to ensure system wide reliability for JCP&L; and

Whereas, the Board has received and adopted the SRM’s Interim Report; and

Whereas, the Board has ordered the Company in its Order of December 22, 2003 in BPU Docket No. EX03070503 to implement the specific actions set forth in the SRM’s Interim Report; and

Whereas, in light of the approaching peak summer period of 2004, Board Staff, the SRM, and JCP&L have discussed certain reasonable actions that can be taken in addition to, and/or in conjunction with, the actions ordered in the Board’s Order of December 22, 2003 in BPU Docket No. EX03070503, which adopted the recommendations contained in the SRM’s Interim Report; and

Whereas, Board Staff and JCP&L have agreed to reflect the consensus of the above-referenced discussions in the form of a Memorandum of Understanding (“MOU”), noting, however, that nothing in this MOU shall be deemed to limit the authority of the Board over JCP&L with respect to all aspects of reliability and service quality issues.

Now Therefore, the parties hereto agree as follows:

1. JCP&L will conduct a Geographical Information System ("GIS") field audit in New Jersey to improve the accuracy of its Outage Management System ("OMS") connectivity model. JCP&L issued a Request-For-Proposal ("RFP") for such a field audit (a copy of which will be provided to the Board Staff), reviewed bids and awarded a contract to a GIS audit contractor (Davey Resources) on March 3, 2004, with commencement of the field audit planned for the end of March 2004. JCP&L shall (i) provide a status report to the Board Staff and the SRM by January 31, 2005 about the status of the field audit, (ii) complete the field audit by the end of 2005 and (iii) report to the Board Staff and the SRM by February 28, 2006 about the results thereof.
2. JCP&L agrees that proper grounding of substation fences is a significant safety (as opposed to a reliability) issue, and agrees to apply to the [Institute of Electrical and Electronics Engineers \("IEEE"\)](#) to request a rule interpretation under the National Electrical Safety Code ("NESC") regarding whether the method of grounding/bonding of the barbed wire strands present at the JCP&L substations is adequate and /or whether such grounding/bonding method is "grandfathered" by previous versions of the NESC. JCP&L will submit a draft of the request for interpretation to the Board Staff by June 1, 2004 for the Staff's review and approval before it is submitted to the IEEE. Upon receipt of the interpretation from IEEE, JCP&L will provide a copy of the interpretation and a report on any actions JCP&L will undertake based on the NESC interpretation to the Board Staff and the SRM. The report shall be signed by a JCP&L corporate officer.
3. If a pentahead bolt was provided by the manufacturer as part of a pad mount transformer when it was installed, JCP&L will replace any such pentahead bolt found to be missing, in accordance with this paragraph 3. JCP&L will replace by June 1, 2004 any missing pentahead bolts on pad mount transformers about which JCP&L has actual knowledge. Furthermore, JCP&L will include the replacement of missing pentahead bolts as a part of its ongoing five-year periodic inspection program for pad mount transformers. JCP&L will continue to use industry standard locking devices on all pad mount transformers. In addition, when Company personnel open a pad mount transformer, JCP&L will clear vegetation around the pad mount transformer to the extent necessary to provide sufficient clearance for the safety of JCP&L's employees.
4. JCP&L will continue and complete its accelerated reliability improvement program (the "ARIP"), as described in Attachment 1 hereto, which, among other things, includes the fusing of certain circuit lateral taps, where necessary and possible, as well as certain main feeder sectionalizing, consistent with JCP&L's circuit protection philosophy.

5. JCP&L will continue and complete the ARIP, which, among other things, includes a specified 34.5 kV telemetry project to establish clear alarm points for voltage, transformers and lines. Such alarms will be presented to the regional dispatch offices (“RDOs”) in the Energy Management System (“EMS”), so that they will provide additional operational decision-making support for planned and unplanned changes in the operating status of energized equipment. JCP&L will also develop a set of written operating procedures in the RDOs governing prescribed reactions to typical or anticipated common alarm conditions. JCP&L will provide a progress report, signed by a JCP&L corporate officer, to the Board Staff and the SRM by June 1, 2004 with respect to the status of the actions required by this paragraph 5.
6. JCP&L will continue and complete its ARIP that, among other things, includes JCP&L’s accelerated implementation of FirstEnergy’s Vegetation Management Specifications, which include a “danger” (or “priority”) tree management program component. Accelerated implementation means that by July 31, 2005, as a result of the completion of this aspect of the ARIP, all JCP&L lines will be on a four-year cycle under the FirstEnergy specifications. JCP&L will thereafter continue to comply with the Board’s four-year “inspect and trim as necessary” cycle standard that has been mandated by the Board’s Orders dated December 16, 1998 in Docket No. EX98101130 and December 30, 1997 in Docket No. EX97080610.
7. JCP&L will continue to include, as part of its applicable construction standards, the objective to achieve 10 ohms or less on all “made electrodes” (ground rods) at the grounding connection points to include every arrester location, with respect to the Company’s 34.5 kV system lightning arrester or overhead static wire program. JCP&L will demonstrate its commitment to this objective by providing a report to the Board Staff and the SRM by August 1, 2004 indicating the measured “as built” ground resistance at each of the ground rods on the newly constructed C203 34.5 kV Mantoloking-Seaside Heights line on the Barrier Peninsula, which is scheduled for completion by May 24, 2004.
8. JCP&L will review and assess the effectiveness of its existing set of written maintenance and testing procedures for all components of its 34.5 kV system, including batteries, switches and controls and will provide additional training with respect to any changes made as a result of this required review and assessment. JCP&L will provide a report, signed by a JCP&L corporate officer, to the Board Staff and the SRM by June 1, 2004 summarizing the status of this review and training effort.
9. JCP&L will complete its review to determine if training on substation grounding design practices has been provided to, and attended by, all appropriate JCP&L employees. JCP&L will develop a schedule to provide such training during 2004 to those JCP&L employees who have not yet received this training and will track attendance so as to assure that all appropriate JCP&L employees have received such training by the end of 2004. JCP&L will provide a report to the Board Staff and the SRM by January 31, 2005 with respect to the number of JCP&L employees that have received such training, both

prior to and during 2004, and the number of employees who have not yet been trained as of the end of 2004.

10. JCP&L will continue to include substation grounding as part of its monthly substation inspection process and will continue to ground out-of-service equipment. JCP&L shall communicate with all of its regional operations employees working in its substations that, as a matter of policy and practice, all equipment in the JCP&L system is to be considered energized and treated as such unless properly isolated from the electrical system and properly grounded. JCP&L represents that it has already addressed the grounding condition at its Rosemont substation.
11. JCP&L recognizes the Board's concerns about both the potential safety and stray voltage reduction aspects of a proper substation ground-grid and will provide a report to the Board Staff and the SRM by June 1, 2004 that discusses the various methodologies that are available to test the integrity of a substation ground grid with and without de-energizing the substation equipment.
12. As JCP&L replaces faded or cracked or otherwise unreadable warning signs on its substation fences and gates, it will do so with signs that comply with the latest ANSI 2535 and OSHA standards. All new signs will also comply with the latest ANSI 2535 and OSHA standards. In addition, in conjunction with its monthly substation visual inspection program, JCP&L will install signs on all substation gates providing substation name and address identifying information and generic emergency telephone numbers (e.g., 911) to be used in the event of an emergency at any substation where the presence of such signage is not confirmed by the monthly inspections.
13. JCP&L agrees that the Board's Order dated July 16, 2003 required it to complete infrared thermography on the 34.5 kV system serving the Barrier Peninsula and to address identified hotspots. JCP&L represents that it has completed the required thermography and addressed identified hotspots in compliance with such Order.
14. JCP&L will continue to insulate new 34.5kV construction of overhead lines at 350kV Basic Impulse Insulation Level ("BIL") as the Company proceeds with system upgrades on the Barrier Peninsula.
15. (a) JCP&L will take reasonable steps to seek to enforce its contracts with joint use pole tenants by providing notice with respect to, among other things, engineering notifications and reviews, make-ready work, the failure of the tenant to properly construct attachments (including improper or missing guys), and the obligation of the tenant to replace or repair its facilities. JCP&L will provide notice to the joint use tenant within five business days of JCP&L's discovery of the need for the joint use tenant to repair or replace its facilities or of the joint use tenant's failure to properly construct its attachments.

(b) When JCP&L is the joint use tenant and becomes aware of a significant structural defect in the joint use owner's pole, JCP&L will provide notice to the joint use owner within five business days of JCP&L's discovery of the defect and of the need for the joint use owner to correct, repair or replace. In cases where the joint use owner fails to take corrective action and its failure to correct creates a substantial hazard with respect to the Company's facilities, JCP&L will take steps to correct the deficiency within 90 days of JCP&L's notice to the joint use owner and will bill the joint use owner for the fully loaded cost of the work and will transfer the ownership of that repair and any associated equipment to the joint use owner.

16. JCP&L will develop and implement its plans to construct the new D-212 line, which runs approximately 7.7 miles along Route 37 and to construct the new cable crossing attached to the underside of the Route 37 bridge. JCP&L will advise the Board Staff immediately about any difficulties in obtaining permitting or any other necessary approvals for the siting of these cables. Beginning April 15, 2004, JCP&L will provide the Board Staff and the SRM with a quarterly report about the progress of this project in the prior calendar quarter. The report will be due within 15 days of the close of each calendar quarter until the project is completed.
17. For every transformer in the following table of substations, JCP&L shall provide to the Board Staff either a record of the dissolved gas analysis and infrared analyses performed since September 1, 2003 or shall perform these tests by April 16, 2004. To the extent that any of such test results indicate an immediate need for corrective maintenance, JCP&L shall review such test results with the SRM and shall schedule and implement such corrective maintenance in consultation with, and subject to the approval of, the SRM. JCP&L will also provide a report, signed by a JCP&L corporate officer, to the Board Staff by July 15, 2004 summarizing the actual remedial actions taken as a result of the foregoing sentence.

Air Field	Air Reduction	Alderney
Allamuchy	Belford	Belmar
Bernardsville	Blairstown	Boonton
Branchville	Broadway	Change Bridge
Chapin Road	Chester	Clark Street
Colonial Oaks	Crawfords	Fair Haven
Fairview	Flanders	Gillette
Greater Cross Road	Green Village	Hackettstown
Hawks	Howell	Hurdtown
Hyson	Island Heights	Jamesburg
Jerseyville	Kenvil	Lacey
Lavallette	Mantoloking	Mcgraw Hill
Millhurst	Monmouth Beach	Morristown

Motts Corner	Mt. Fern	Mt. Pleasant
Newburgh	North Branch	North Newton
Ocean Beach	Old Bridge	Ortley Beach
Pine Beach	Pleasant Plains	Riverdale
Rocktown Road	Seaside Park	Stanton
Stewartsville	Sussex	Taylor Lane
Traynor	Washington	Whitesville
Woodbine	Woodland	Woodruffs Gap

18. JCP&L will complete, by June 25, 2004, the following major projects: (i) replacement of the transformers at the Airfield substation; (ii) the transformer and equipment upgrades at the Atlantic, Freneau, Lakewood Co-Gen, Glen Gardner and Hackettstown Hospital substations; and (iii) action to permanently relieve the anticipated overloads at the Hurdstown and Colonial Oaks substations or upgrades to the transformers at these substations. JCP&L will provide a report, signed by a JCP&L corporate officer, to the Board Staff by July 25, 2004 about the actions taken at each of these locations.
19. To the extent that JCP&L does not have real time monitoring of loads either through its EMS system or through its real time metering system at the substation transformers listed in the table below, JCP&L will undertake such EMS monitoring or install such real time metering by June 25, 2004. JCP&L will also provide a report to the Board Staff and the SRM about the status of the real time monitoring/metering at these substation transformers by July 25, 2004.

Belford 1	Belmar 1	Blairstown 1
Fair Haven 2	Flanders 4	Hyson Bank 1
Jerseyville Bank 2	North Branch 2	North Newton 1
Riverdale 1	Stanton 2	Stewartsville 1

20. For each week of the 2004 summer peak season (June 1, 2004 through September 30, 2004), JCP&L will provide a weekly report to the Board Staff and the SRM as follows: (i) the actual measured peak loading for the prior week on each of the substation transformers on the JCP&L system which have electronic metering; (ii) the actual monthly peak reading for the prior month on each of the substation transformers on the JCP&L system which do not have electronic metering but which were read during routine monthly substation inspections conducted during the prior week; and (iii) the State Estimator projections with respect to peak loading for the prior week for any remaining substation transformers not covered in (i) and (ii) above. Each report will be for the week ending 14 days prior to the date of the report. The first report will cover the period June 1 through June 9 and would be due on June 23, 2004. The second report will cover the period June 10 through June 16 and would be due on June 30, 2004 (and each subsequent

report will follow in sequence). In the interests of efficiency, JCP&L may, prior to June 1, 2004, submit to the Board Staff and the SRM a sample of an existing report or reports that may satisfy this requirement.

21. The timing of completion of any JCP&L commitments as set forth in this MOU (including the ARIP described in Attachment 1 hereto) shall be subject to the occurrence of force majeure events beyond the reasonable control of JCP&L, including, but not limited to, governmental action or inaction with respect to permitting or other matters.
22. It is understood that this MOU arises in connection with the focused audit conducted under this specific docketed proceeding and addresses actions that may be of value to improve the reliability of electric delivery for the summer 2004 peak period. As such, the execution by Board Staff, approval by the Board and implementation by JCP&L, of this MOU shall constitute final resolution of the Consultant's draft interim recommendations and any of the Consultant's final recommendations addressing substantially the same subject matter that arise from such focused audit and JCP&L's compliance with the terms hereof shall constitute full, complete, sufficient and satisfactory resolution of, and compliance with, this MOU.

IN WITNESS WHEREOF, each of the parties hereto has caused its duly authorized attorney to execute and deliver this MOU as of March 24, 2004.

Peter C. Harvey
Attorney General of New Jersey
Attorney for Staff of the New Jersey
Board of Public Utilities

Jersey Central Power & Light Company

(SIGNED)

(SIGNED)

By: _____
Rebecca Hobbs
Deputy Attorney General

By: _____
Marc B. Lasky
Thelen Reid & Priest LLP

ATTACHMENT 1

Project	Project Scope and Dimensions	Projected Completion Date
Circuit Reliability Index (“CRI”) Enhancements	Accelerated review of 2002 reliability data, identify outage causes and recommend solutions to prevent re-occurrences. The review is to focus on high impact protection coordination solutions including installing additional fusing/reclosing locations, prioritizing tree trimming schedules, direct maintenance and capital projects, and reviewing data integrity and operational, maintenance and design issues.	12/31/2004
Telemetry	Review information available via telemetry from each New Jersey sub-transmission substation and make recommendations to upgrade, replace or add telemetry equipment as appropriate. This project will enable 34.5 kV operations decision-making capability through display information and the utilization of the State Estimator and Dispatcher Power Flow Study functions in Energy Management System (“EMS”). The Barrier Peninsula substations are to be completed by 3/31/04. The remaining Central New Jersey (“CNJ”) locations will be complete by 5/24/04 and the Northern New Jersey (“NNJ”) locations will be complete by 12/31/04.	12/31/2004
Accelerated Vegetation Management Program	To reduce tree-related outages, the amount of trimming scheduled is being increased so that <u>during 2005, as a result of the completion of this aspect of the ARIP, all JCP&L lines will be on a four-year cycle</u> under the FirstEnergy specifications.	7/31/2005
34.5kV System Circuit Coordination	To improve circuits with poor CRI numbers, review the current 34.5kV system to determine recommendations to change relay settings and operating practices, perform corrective maintenance and install additional protective equipment.	12/31/2004
34.5 kV System Circuit Automation	To improve circuits with poor CRI numbers, remote controlled sectionalizing devices will be added to the 34.5 kV system, and controls will be added to existing non-automated switches. This will improve both switching capability and restoration of circuit capability. Nine (9) NNJ and one (1) CNJ 34.5 kV circuits have been identified for automation work as a result of reviews of outage history and customer load at risk. Five (5) projects involve line switches and five (5) projects involve substation switches.	12/31/2004

Project	Project Scope and Dimensions	Projected Completion Date
Distribution Substation Metering Upgrade	Approximately 1,500 feeder/transformer-metering points will be upgraded to monitor loading of distribution feeder and substation transformers in CNJ and NNJ to improve the ability to monitor loading of distribution feeder and substation transformers in the CNJ and NNJ Regions.	12/31/2004
Mobile Capacitor Banks	Procure two 36 kV, 14.4/21.6 MVAR mobile capacitor banks for use at JCP&L -- one each for CNJ and NNJ. These capacitors can be installed quickly to address system events, such as loading/low voltage due to high electric usage, and moved as system conditions change.	12/31/2004
Outage Management System ("OMS") Upgrade	Conduct a study in order to develop a business case for decision about upgrading the PowerOn OMS to latest version (<u>i.e.</u> , version 3.5). This upgrade will be studied for possible implementation in both East and West FirstEnergy PowerOn.	12/31/2004
Geographic Information System ("GIS") Field Audit	Audit distribution system assets, on which OMS prediction accuracy is dependent, in CNJ and NNJ regions and correct GIS data -- including streetlights and joint use attachments.	12/31/2005
34.5 kV C203 New Circuit	Design and construct a new 34.5 kV line from Mantolo king to Seaside Heights (project revised to extend line beyond Lavallette) along Rt. 35 South, approximately 6.6 miles. Installation of this new line, along with other system upgrades, will increase the capacity to serve the area in the event of a failure on the existing V126 and X50 circuits. The wood pole, single circuit (future double), 69 kV horizontal post circuit (556.5-kcmil ACSR conductor and overhead static wire) is required by 5/24/04.	5/24/2004
34.5 kV D212 New Circuit	Design and construct a new 34.5 kV overhead line from Manitou to Seaside Heights (excluding the Barnegat Bay crossing), approximately 7.7 miles. Installation of this new line, along with other system upgrades, will increase the capacity to serve the area in the event of a failure on the existing V126 and X50 circuits. This wood pole, single circuit, 69 kV standard horizontal post circuit (556.5-kcmil ACSR conductor and overhead static wire) is required by 5/24/04. All under-built facilities will be transferred to the new structures.	5/24/2004

Project	Project Scope and Dimensions	Projected Completion Date
Barnegat Bay - New Cable Crossing	Design and construct a new 34.5 kV cable crossing of the Barnegat Bay utilizing 1250 kcmil Cu insulated cable installed in fiberglass conduit for a distance of approximately 1 mile. Cable to be installed in conduit on the J. Stanley Tunney Bridge (westbound Route 37), connecting the new D212 circuit from Manitou to Seaside Heights. The installation of this new line, along with other system upgrades, will increase the capacity to serve the area in the event of a failure on the existing V126 and X50 circuits. Construction completion is required by 5/24/04, subject to receipt of requisite permitting. In addition, there has been a recent scope change to install additional cables on the underside of the Route 37 bridge to be available to serve as a by-pass to the V-126 underwater cable when it is energized. Efforts are currently under way to incorporate the additional construction work in to the original completion schedule.	5/24/2004
Manitou Sub New 34.5 kV Breaker	Design and construct a new 34.5 kV breaker at Manitou Substation to support new circuit exiting substation. The installation of this new line, along with other system upgrades, will increase the capacity to serve the Barrier Peninsula area in the event of a failure on the existing V126 and X50 circuits. Construction completion is required by 5/24/04, subject to receipt of requisite permitting.	5/24/2004
Ocean Beach - 34.5 kV Capacitor Addition	Design and construct a new 34.5 kV, 5.4 MVAR (with future expansion to 10.8 MVAR), housed capacitor. The installation includes voltage sensing and automation. The installation of this capacitor bank, along with other system upgrades, will increase the capacity to serve the Barrier Peninsula area. Construction completion is required by 5/24/04.	5/24/2004
Ortley Beach - 34.5 kV Capacitor Addition	Design and construct a new 34.5 kV, 5.4 MVAR (with future expansion to 10.8 MVAR), housed capacitor. The installation of this capacitor bank, along with other system upgrades, will increase the capacity to serve the Barrier Peninsula area. Construction completion is required by 5/24/04.	5/24/2004

Project	Project Scope and Dimensions	Projected Completion Date
Perform Corrective Maintenance on X50 between Seaside Heights and Seaside Park (Summer 2004 readiness)	Perform aerial inspection and corrective maintenance of X50 line from Seaside Park to Seaside Heights (2.6 miles). Scope revised 12/17/03 as a result of SRM Interim Report Recommendation # 8 for inspection to include: perform line patrol to identify any corrective maintenance that is required, perform a ground line inspection on all poles that have not been inspected within the last 10 years, perform a climbing inspection on 20% of the poles that require a ground line inspection, and replace and transfer construction on all poles identified as defective. Completion of all of the above required by 5/24/04.	5/24/2004
Rebuild X50 between Seaside Heights and Seaside Park	The portion of the X50 circuit between the Seaside Heights and the Seaside Park substations, that is not being rebuilt as a part of the existing X50 reconstruction project, is to be rebuilt to present standards regarding conductor strength, spacing, clearances and lightning protection by 5/23/05.	5/23/2005
Acquire and Maintain Underwater Spare Replacement Cable	Replacement cable for future repair of the underwater crossing must be identified, properly stored and available to the repair site within 24 hours of the location of the fault and the determination of the type and footage of cable required. Completion of all of the above required by 5/24/04.	5/24/2004
Install Fault Detectors on X50, C203, and V126	Install fault detectors on the four Barrier Peninsula water crossings and the underground dips for the X50, V126, C203 and the new D212 circuit planned for system reinforcement of the island. Fifteen fault detectors existed previously. This project will add fault detectors at additional locations by 5/24/04.	5/24/2004

**Accelerated Reliability Improvement
Projects
Completed Projects**

Project	Project Scope and Dimensions	Projected Completion Date	Actual Completion Date
Distribution Capacitors	This project is to improve VAR support on the NJ distribution system. The original 2003 work plan included 150 MVAR (in addition to planned 34.5 kV capacitor installations). As part of the ARIP, 250 MVAR to be installed by the summer of 2003 was added to the work plan.	8/1/2003	8/1/2003
CNJ Regional Dispatch Office ("RDO") Relocation	Currently both the CNJ and NNJ Regions are handled by the same RDO in Morristown. A separate RDO will be established in CNJ.	2/29/2004	2/29/2004